CONTROL TOUCH PANEL

Manual Instruction

ENGLISH

Dear Customer

Thank you for selecting our product. We are confident we can fully satisfy your expectations by offering you a wide range of technologically advanced products which directly result from our many years of experience in faucet and fitting production.

ATTENTION! **For care, use soft towel with soap and water only! Under no circumstances should you use any chemicals. For faucets with ORB (oil rubbed bronze) finish please be extra careful not to damage, scuff or ruin the finish during the installation and cleaning!**

Model **AQUA-SENSE**

Contents

Water inlet
Tem. Control
Flow rate control
8water outlet
LED
Music
Movie
Speaker

Technical information

Water inlet	2inlets(Hot and cold)
Tem. Control	SMA(Shape memory alloy) catridge(JFL)
Flow rate control	3/4"head work
8water outlet	Solenoid valve(JFL)
LED	Lighting and chromotherapy
Music	Mp3,USB port and AUX
Movie	Mp4,USB port
Speaker	4water proof speakers

Hardware Spec.

CPU: S5PV210
RAM: 512MB DDR2
MEMORY: SDCARD 4GByte or 8GByte
LCD: 480x800 Resistive Touch 7" screen
SOUND: STREO,10W*2 AMP
ETC: Control Board Connector
External AUX support
USB Memory stick support

Software Spec.

OS: Android 2.3.3
T-Shower application ver.2

For safe and long-term use:

1. Avoid temperatures over 60 C
   Do not dry product with an electric dryer. This may cause injury or damage to the product.
2. Always use and store this product at room temperature.
   Avoid high or low temperatures. This can damage the components.
3. Do not dis-assemble the product.
   This could invalidate your warranty.There is also the possibility of product failure and electric shocks.
4. Take care when using the touch panel.
   Be careful not to drop or cause impact to the panel.
5. Always keep this product clean.
   Wipe this product only with a soft cloth. Do not use chemical products which can damage the surface.
6. Do not use excessive force on any components or functions.
   This will damage the product
7. Keep a distance from other electric products such as hairdryers or electric shavers.
   Water contact with these items may cause electric shock.
8. Do not install in an area with low water pressure.
   This product requires at least 2.0bar.
9. After using hot water, have cold water run some time so that no hot water remains inside the product.
   Remaining hot water inside the product may cause burns when next used.
10. Do not spray water directly into your face.
    Water sprayed directly into your face may harm your eyes.

11. Do not turn body jet by force.
    It may cause product failure or damage.
12. Keep away from fire.
13. Do not use if the product appears damaged.
    This may cause electric shocks.
14. Children must be supervised by an adult when using this product.
15. Try not to use this product in temperatures less than 0°C.
    This may shorten the life of the product and cause other damage.
16. Do not install or use in any manner other than indicated in these instructions.
    Doing so may cause product failure or injury.

How to clean product

Please wash the product as follows in order to maintain the appearance and life of all parts.

1. Remove all stains only with a soft cloth or sponge.
2. Remove persistent stains only using a chemically neutral detergent.
3. Clean and remove dirt from the shower head using a soft brush. The water outlet holes can be cleaned using a small needle to poke out material that is causing a blockage.
   If product is damaged, it may cause harm to property or injury to people.
4. Never use the following, which will damage the surface of the product
   Cleanser,synthetic detergent,acid detergent,sodium hypochlorite,thinner,benzene,tile cleaning solution,abrasive powder or nylon cloth.

Maintenance of waterproof

Proper care of the product is essential before and after use.

-Before use: Check if there are any scratches on the front film.

-After use: Wash off bubbles, salt, and other residue. Then wipe thoroughly with a dry towel.

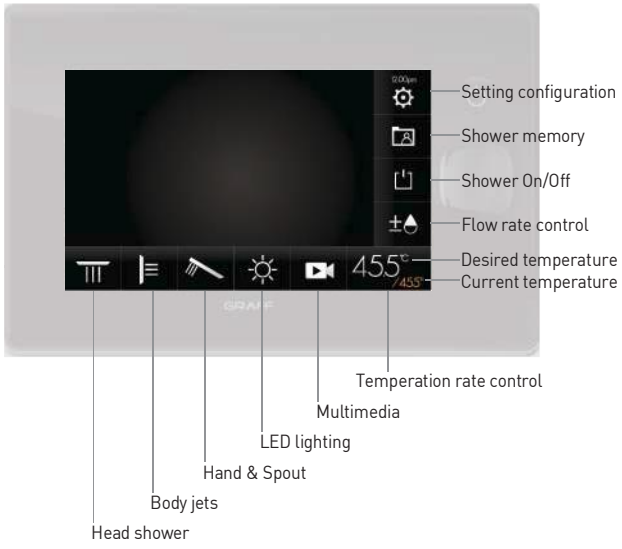
Maintenance of waterproof parts.

-Regular maintenance is essential to maintain performance. Please follow maintenance steps shown in the user manual.

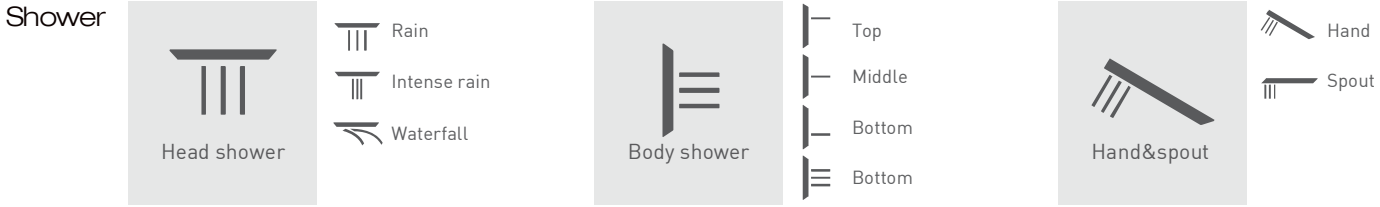
Functions

Exterior functions

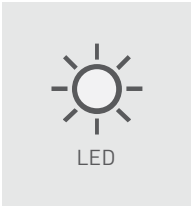
Display functions



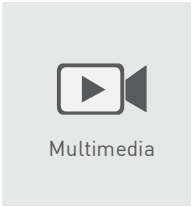
Icon



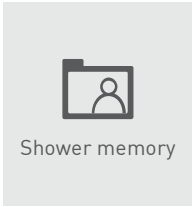
Additional function



Monochrome
Mix

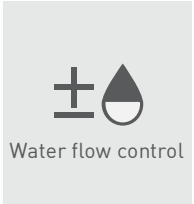


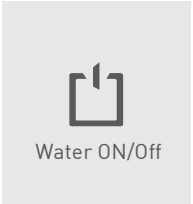
Music
Movie



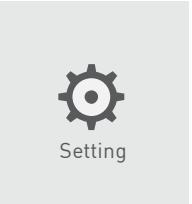
A User A
B User B
C User C
D User D

Water control





User settings



Screen setting
Sound setting
System setting
Information

Touch screen

Instructions for use

- Do not attach anything to the screen, such as a protective covering.
- Do not press the touch screen with excessive force.
- Touch the screen in the exact position of the desired function with your finger.
- Do not touch the screen with sharp objects and do not use your fingernails to touch the screen.

Press

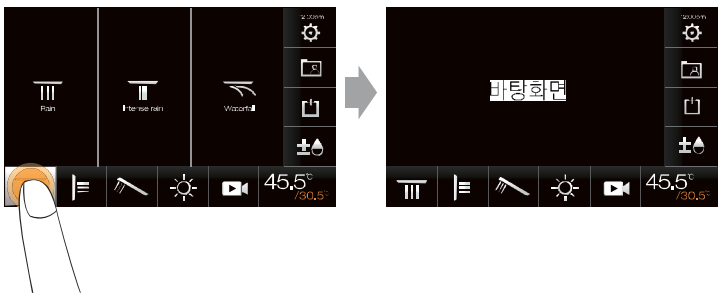
If the main button on the top is once pushed, relevant screen appears. If page button is once pushed, water flows out of the relevant spout.

Long Press

You can go back to the background-screen by touching and holding your finger on the icon for a couple of seconds.

Functions are active.
Current screen

All functions
are not active.



Power On/OFF

Power supply On/Off

ⓐ Press the power supply button for 2seconds.
ⓑ The loading screen is displayed when turning on.
ⓒ Press the power supply button for 2seconds to turn off.

Screen save

When the screen is not touched for a specified period of time,the screen will automatically turn off.

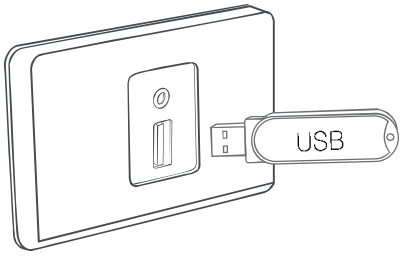
ⓐ Whilst the screen saver is active, the Power supply button will flash.

ⓑ Press the power supply button once,or touch the screen to activate the LCD.

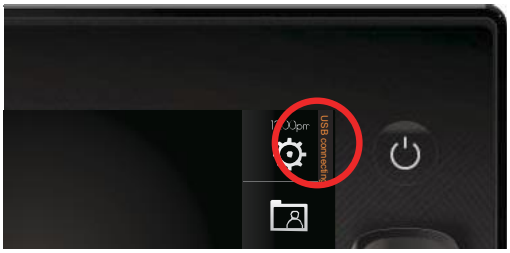
USB port connection

It is used when reproduction or copying of the music, video, image files from the T-Shower to the Internal memory is desired.

ⓐ Insert your USB into the USB Port.



ⓑ If connected, a USB icon is appeared on the right top of the screen, and it can be confirmed at the Music, Movie, Background Image Setting, Update.

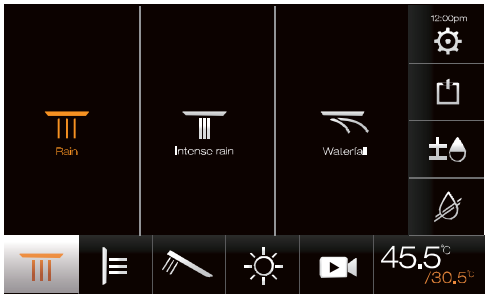


Usage shower

Shower funtion allows bathers to enjoy different types of shower head,body jets,hand shower & spout.

Head shower

ⓐ Press button at the top of screen.
ⓑ Choose the funtion of your choice.



Rain showe
Water runs from the overall head surface

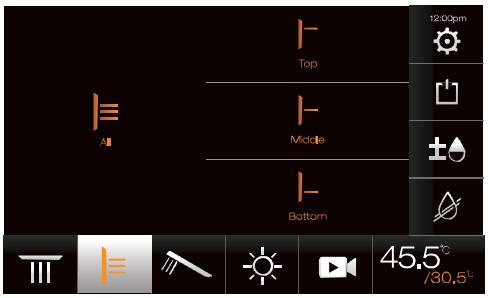
Intense rain shower
Water runs from the central head surface

Waterfall
Water runs like a waterfall

*Head Shower Function can not be used in duplication.

Body shower

ⓐ Press button at the top of screen.
ⓑ Choose the funtion of your choice.



Top
Water runs from the top of body jets

Middle
Water runs from the middle of body jets

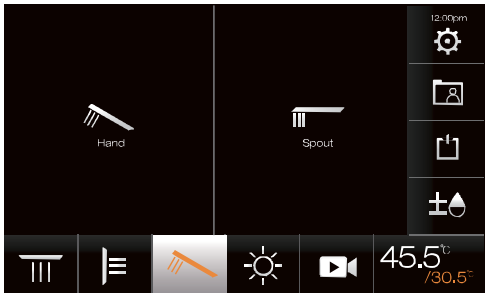
Bottom
Water runs from the lower of body jets

*Body Shower Function can be used in duplication.

Shower funtion allows bathers to enjoy different types of shower head,body jets,hand shower & spout.

Hand shower & Spout

ⓐ Press button at the top of screen.
ⓑ Choose the function of your choice.



Hand shower
Water runs from the hand shower

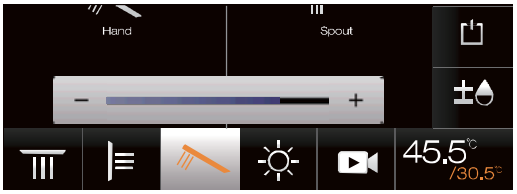
Spout
Water runs from the spout

*Hand Shower & Spout Function can be used in duplication.

Flow rate can be adjusted easily with touch.

Water flow control

ⓐ Press button at the lower of screen.
ⓑ Water flow control bar is displayed.
ⓒ Adjust the flow rate by pressing - or + button.



*If the Flow Control Button is pushed one more time or not used for 5 seconds, it disappears automatically.

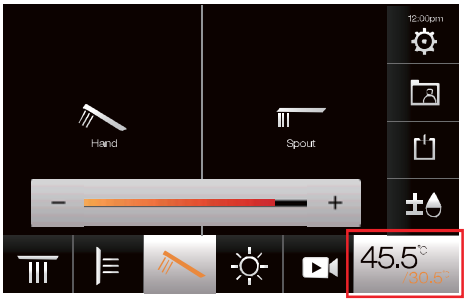
Water On/Off

ⓐ Press button when you want to stop the water.
ⓑ the button flicker and .
ⓒ Press button again to use the previous function.

Water temperature can be adjusted quickly and conveniently with Touch or Jog Dial.

Temperature control1_Button

ⓐ Press 45.5℃ /30.5℃ button at the lower of screen.
ⓑ Temperature control bar is displayed.
ⓒ Adjust the temperature by pressing - or + button.



*The temperature button disappears if pushed one more time or not used for 5 seconds.

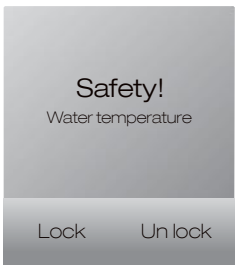
Temperature control2_jog dial

ⓐ Turn the temperature control button either to the right or the left to quickly display the temperature bar.
ⓑ The temperature bar is then displayed. Turn the knob to the right or left to adjust the temperature.

*The Jog Dial disappears automatically if not used for 5 seconds.

Safety mode

ⓐ Safe window is displayed when the temperature reaches 38˚C.
ⓑ When a higher temperature is desired, press Un lock to adjust the temperature.

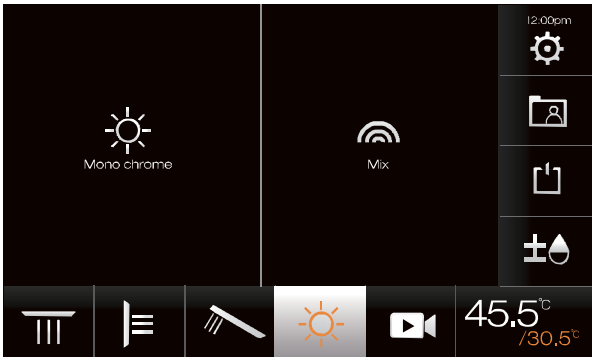


Usage LED lighting

Choose from 7 different colours or have them automatically change for you.

LED

ⓐ Press button at the top of screen.
ⓑ Press the Mono/Mix Icon for LED chrome therapy shower of your choice.



LED Monochrome/Mix

LED Monochrome
Choose the one color of your choice.

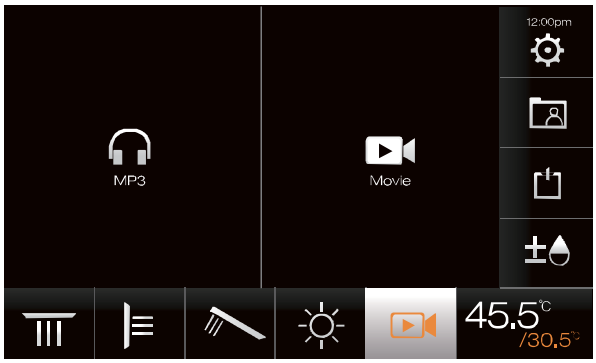
LED Mix
Automatic colour changes.

Multimedia

Enjoying the music and video during the shower makes more pleasant shower time.

Multimedia

ⓐ Press button at the top of screen.
ⓑ Choose the function of your choice.



*If either Music or Movie is selected, it is moved to the Player Page.
*There will be no noise only when the AUX cable is securely inserted while you are listening to a music by use of the AUX.

Music_Player

If entered into the Music Page, music is replayed automatically.
Other musics can be selected by pushing icon.

Playback	Previous Step :play maintaining
Pause	File list (Internal memory/USB)
Previous music	Close:Music stops
Next music	
Volume up	
Volume down	
equalizer	EQ Normal / Bass / Treble / Dance / Rock / Club
Repeated playback	List Replay 1 Time / Repeated Replay / 1Music Repeating / Random paly
Repeated playback folder	

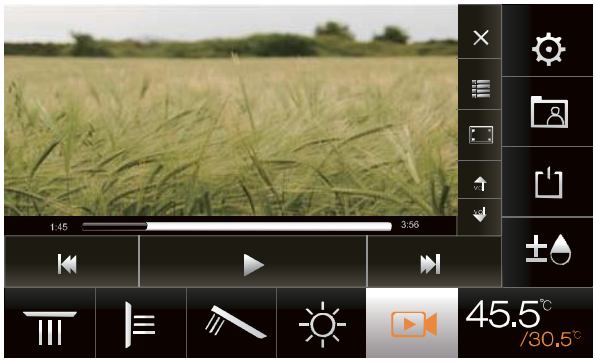
Enjoying the music and video during the shower makes more pleasant shower time.

Movie_Player

If entered into the Movie Page, movie is replayed automatically.
Other movies can be selected by pushing icon.

Internal memory(Music/Movie)

If the button is pushed, Internal memory page appears.
Internal memory editing/selection of replay music can be done.



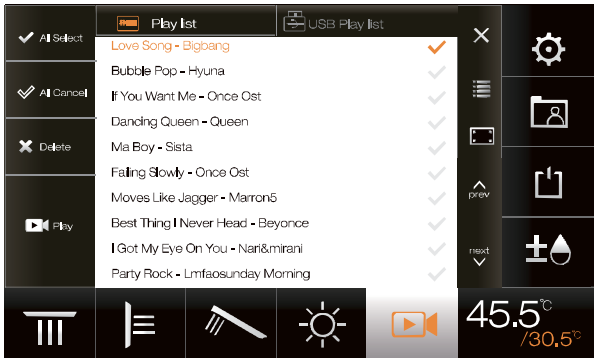
	Full screen

*Full screen can be seen by touching the screen which shows the full video screen.

Files playback
ⓐ Select the files of your choice.
ⓑ Press Play button.

Files delete
ⓐ Select the files.
ⓑ Press Delete button.

*A Pop-up Window appears, which shows the progress of the file deletion.



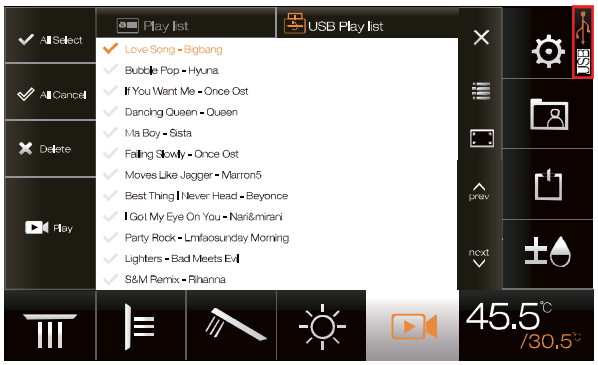
	Internal memory
	USB memory
All Select	Select all files
All Cancel	Cancel all files

Delete	Delete selected files (Internal memory only)
Copy	Copy selected files to Internal memory(USB memory only)
Play	Selected files palyback
prev	Previous list
next	Next list

Enjoying the music and video during the shower makes more pleasant shower time.

External USB memory(Music/Movie)

Insert a USB memory into USB port and push USB Play list button,then file list of external memory appears on the screen accordingly.
You can copy/select files from the memory



*Once you insert USB memory to USB port, USB will appear at the top of the screen only if well connected.

File playback
ⓐ select a file or a folder for playback.
ⓑ press Play button.

File copy to internal memory
ⓐ select file or folder of your choice.
ⓑ press Copy button.

*Once any progress begins, the status bar will appear on the screen.

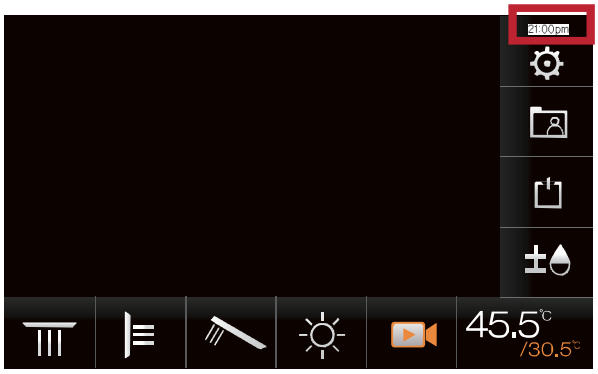
*If internal memory runs out of space,the warning appears on the screen.

Bluetooth

Enjoying the music and video during the shower makes more pleasant shower time.
*In order to use your external memory, it`s necessary to format the memory with provided program.

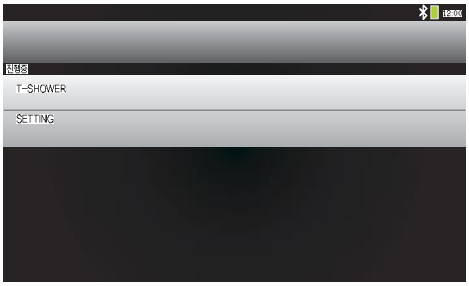
Use Bluetooth

Insert a USB memory into USB port and push USB Play list button,then file list of external memory appears on the screen accordingly.
You can copy/select files from the memory



1.Touch the present time at the upper right corner of the screen.

2. drag "date&time setting down.

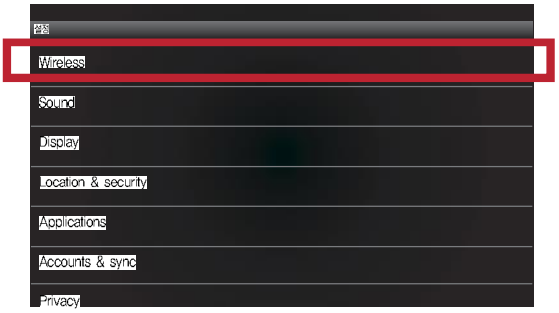


3. touch "setting"

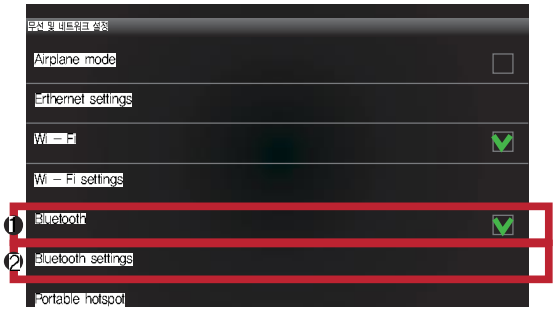
Enjoying the music and video during the shower makes more pleasant shower time.

*In order to use your external memory, it`s necessary to format the memory with provided program.

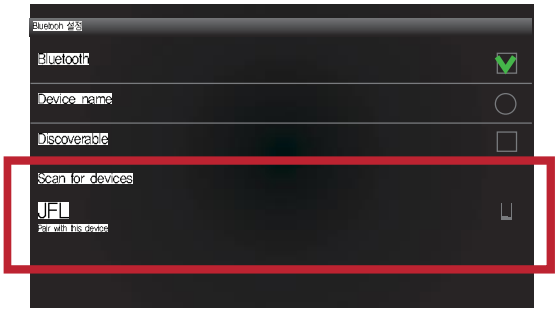
External USB memory(Music/Movie)



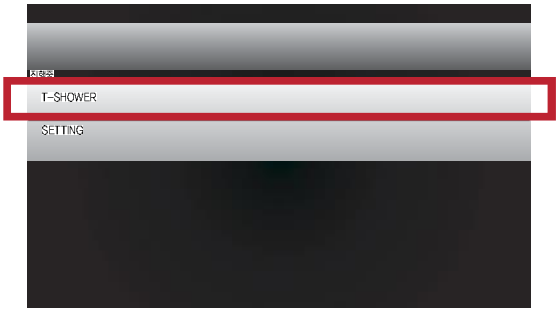
4. touch "wireless"



5.Touch "Bluetooth" then your device is connected within 15~20 secs.
In case of any i-phone device, password window appears on the screen then please enter the password "0000"



6. You can check every device available by touching "Bluetooth setting"



7. If you want to return to main menu, drag grey line on the screen and touch "T-shower"

Shower memory

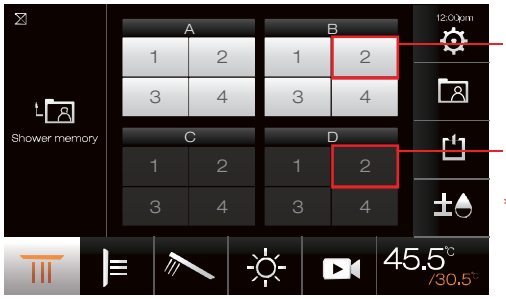
Customized shower service where optimized shower environment of a user is memorized and implemented again at once. Various customized shower can be enjoyed as 4 users have each 4 shower memory folders respectively.

Saving the Shower Memory

ⓐ Run the function to be used.
ⓑ Push Save button at the right side of the screen.

*Functions to be saved: Desired Temperature/ Flow Amount/Shower Head/Body Shower/Hand & Spout/LED/Multi Media Information.

ⓒ Select the user and shower folder Number.



A saved user memory exists in the number.

No saved user memory in the number.

*It can be saved at the folder where shower information has been saved(Saving by Overwrite Mode).

ⓓ After checking the information to be saved, save it by pushing the OK .

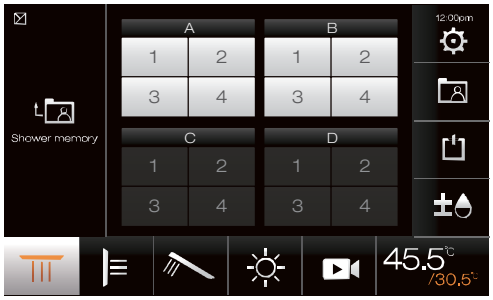
* If you wish to save it at another User/Folder, return to the previous page by pushing the and select again.
* If is pushed, it returns to the Shower Page without being saved.

*The information just saved is displayed with a colored icon.Gay icon is an information not saved.

Customized shower service where optimized shower environment of a user is memorized and implemented again at once. Various customized shower can be enjoyed as 4 users have each 4 shower memory folders respectively.

Shower Memory Loading

ⓐ Push the shower memory Icon .
ⓑ Select the user number .



1 Clear number — A saved user memory exists in the number

1 Hazy number — No saved user memory in the number

ⓒ Shower starts if the Start is pushed after the information saved at the user number is confirmed.
* If you wish to select another User/ Folder, return to the previous page by pushing the and select again.
* It returns to the Background Screen if the is pushed.
*Initialization method of shower memory. :User setting/System/Reset.All the set values of the system are initialized.

ⓔ If the shower is started, the first function page is seen out of the operating functions.

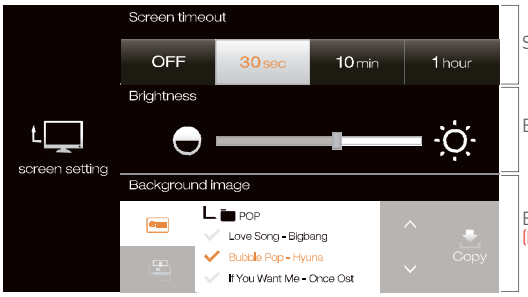
User setting

The environment customized to a user can be set by setting screen, sound, system, and product information can be seen.

Entering

ⓐ Pushing the User Setting Icon .
ⓑ It returns to the Background Screen if the User Setting Icon is pushed once again.

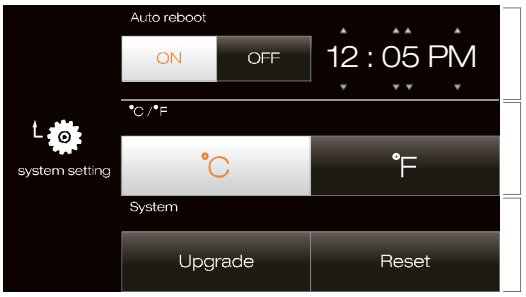
Screen setting



Screen saver
Brigthness
Background image (Refer to page 22)

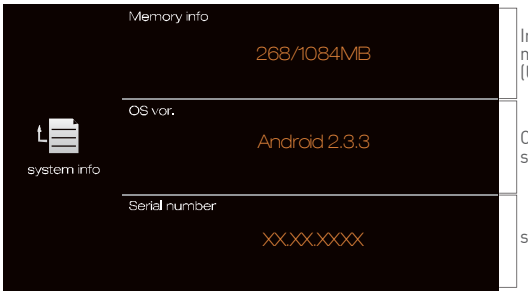
System setting

Update:Copy a update file to a USB memory and connect it to USB port and push "Update" button
Reset:All user information will be initialized (Ex:System setting memory/Shower memory)



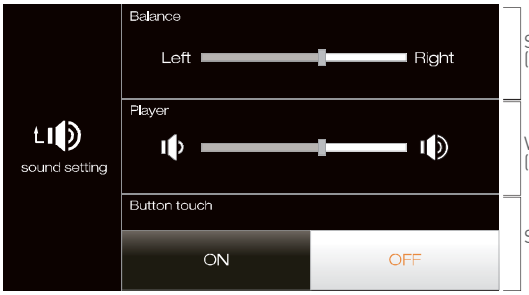
Auto reboot (To protect overload)
Temperature unit
Update/Reset

Information



Internal memory info. (Used/Total)
Operating system
serial number

Sound setting



Stereo adjustment (Left & Right speaker)
Volume (System sound)
Sound effects On/Off

Trouble shooting

Is there any problem with the product? Please check followings before requesting the Service.

Check list 1

Problem	Specific situation	Recommended action
Power is not supplied to controller	Is power connected to power supply?	Connect the power
	Is the connection made from the power supply to control box or is the electric wire disconnected?	After checking the connection from power supply to control box,connect again if necessary.
	Is wall pad cable loose or disconnected?	Check cable connection of wall pad connect again, if you necessary.
	Does circuit breaker pop out?	Cleane cable connection of wall pad and connect again, if you necessary.Push in circuit bleaker
Controller operates normally, but no water comes out.	Is pipe connected from stop vavle to control box?	Clean entering water filter at pipe connected to control box(refer to page 34)
	Is hot and cold water supplied?	Supply water to the pipe connected to control bax.

Check list 2

Problem	Specific situation	Recommended action
Water keeps flowing	Is relevant function on wall pad turned off?	Turn the power off and on again. If necessary, shut off the supply of water and electricity and call service centre.
	Water pressure of stop valve is unstable.	Install pressure regulator at supply line. If needed, shut off the supply of water and electricity and call service centre.
	Is there is a pressure difference of more than 0.35 bar? between cold water and hot water?	Install pressure regulator so that constant pressure difference can be set.
Water pressure is weak.	Is tap water main valve open a fraction?	Check to see if water pressure of the valve supplied to control box is 2.0 bar or more.
	Is volume flow set weak at wall pad?	Adjust wall pad volume flow to increase volume flow.

Check list 3

Problem	Specific situation	Recommended action
Only hot water comes out or hot water comes out and stops.	hot water and cold water pipes connected in reverse.	Check to see if hot water supply pipe is connected to "HOT," and cold water supply pipe to "COLD."
Only cold water comes out.	Is hot water turned on or connected to hot water supply pipe at control box?	Turn on hot water or connect hot water valve.
	Is hot water supply shut off?	Check hot water supply pipe filter and wash or change.
Water drips from the unused shower head.	Does water drip soon after you stop using or after a certain time?	It is a normal phenomenon in which remaining water in the shower flows out for a short period of time.
Water does not come out evenly from shower nozzle.	Is nozzle at shower blocked?	Clean nozzle hole by using sharp object (needle or safety pin).

Check list 4

Problem	Specific situation	Recommended action
Temperature changes and fluctuates severely.	Is water temperature unstable? Is supply temperature of hot water unstable?	Check water temperature at water inlet and its sufficiency.
	Is there is a pressure difference of 0.35 bar or more between cold water and hot water?	Install pressure regulator.
	Is boiler capacity insufficient or is there any problem with water heating system?	Check to see if water temperature of hot water to control box is maintained at a constant 60°C.
	Is water being used elsewhere while T-shower is in use?	Check to see if water pressure of the pipe to control box is 1.5bar or more.

La pression de l'eau est basse. La vanne n'est pas étanche. (Attention : Risque d'électrocution et d'endommager l'appareil. Fermez le circuit d'eau et débranchez du courant.)	La vanne est-elle connectée correctement et assure l'étanchéité? Y a-t-il de l'eau dans l'appareil?	Vérifiez l'état de tous les raccordements et réparez-les en cas de besoin. Il convient de vérifier en détail l'état technique de l'appareil. Débranchez l'arrivée d'eau et d'électricité, puis contactez le service après vente.
	Est-ce que le ruban de Téflon ou le joint sur les raccordements est endommagé ou bien se détache?	Vérifiez que le ruban de Téflon ou les joints ne sont pas endommagés au niveau du raccordement qui fuit. En cas de besoin, remplacez le joint.

Liste des problèmes (5)

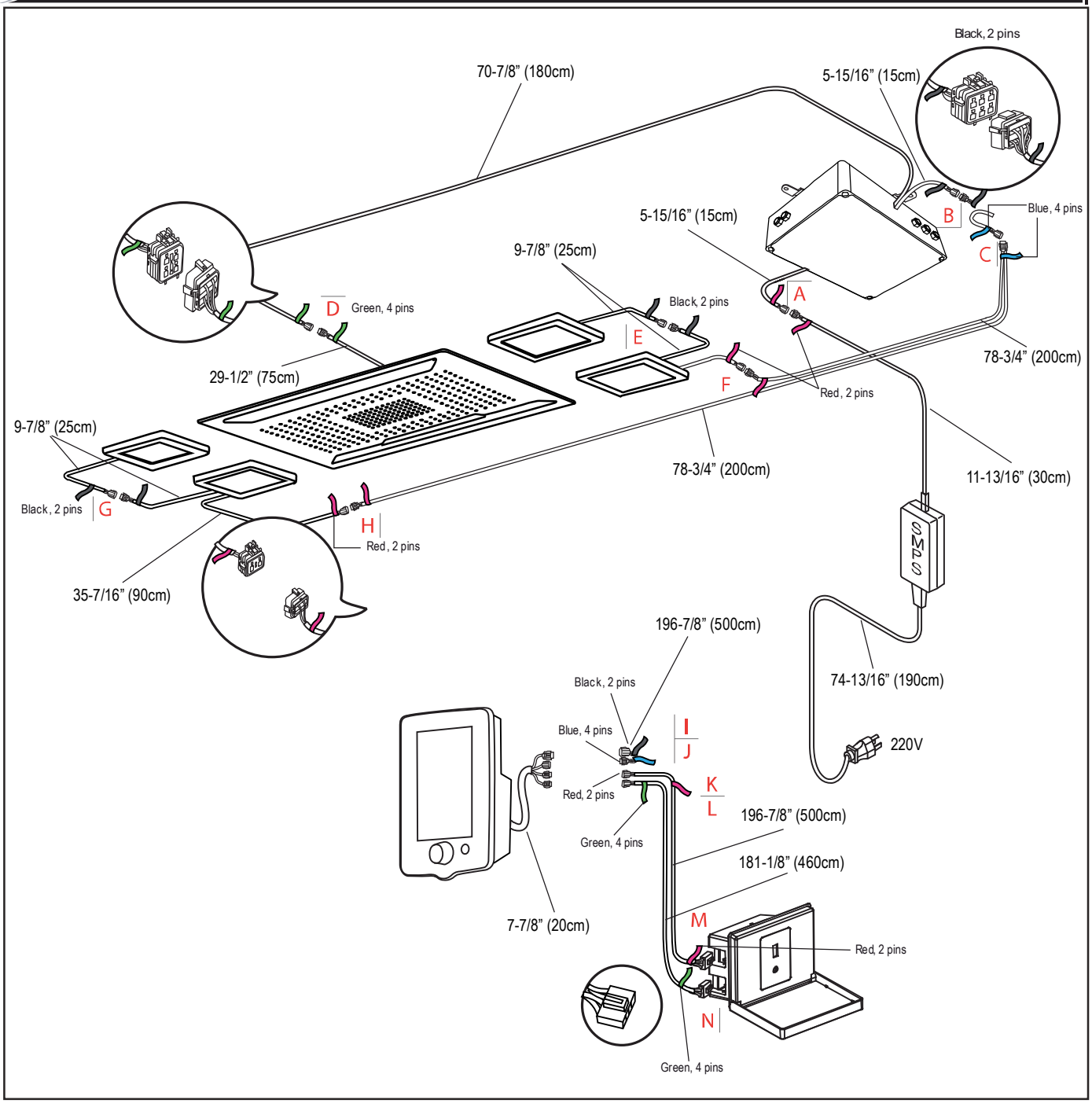
Problem	Specific situation	Recommended action
Control function is normal,but flow is unstable and decrease.	Is water supply valve shut off?	Check valve at supply valve. Clean filter at water supply valve(refer to page 7)
	Has water pressure dropped over time?	Check to see if volume flow meets the minimum requirement of 2.0bar.
	Is water being used elsewhere while T-Shower is in use?	Check to see if water pressure of the pipe to control box is 2.0bar or more.
LED light is fading or not working.	Is white acrylic shower head cover contaminated?	Shut off power and clean by removing.
	Does LED light work?	Check to see if cable between wall pad, control box and shower head is disconnected or loose? Refer to "Cable layout " part of T-Shower user manual. (Page 35)

Is there any problem with the product? Please check followings before requesting the Service.

System error diagnosis

Problem	Specific situation	Recommended action
Thermostatic valve	Temperature Sensor Error Temperature Motor Locking	Disconnect the power cord, then connect again.
	The connector is off or the line is disconnected	Make sure the connector is in right position.
Thermistor sensor	Thermistor Problem	Check if hot/cold water is correctly supplied.
	The connector is off or the line is disconnected	Make sure the connector is in right position.
Hot water supply	Water supply is not available	Check the inlet pipe of cold water.
Cold water supply	Boiler Problem Hot water supply is not available	Check if the boiler has a problem.
On / Off valve	Temperature Sensor Error Temperature Motor Locking	Disconnect the power cord,then connect again.
	The connector is off or the line is disconnected	Make sure the connector is in right position.
Flow rate sensor	Flow Sensor Problem Connector is off or line is disconnected	Check if the flow connector is connected. Check if the line is disconnected.

Cable layout



- **GUARANTEE**:
  The guarantee conditions are contained on a separate sheet.
- **IN THE EVENT OF A PROBLEM:**
  e-mail: graff@graff-mixers.

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